IN THE CLAIMS:

Please cancel Claim 2 without prejudice to or disclaimer of the recited subject matter.

Please amend Claims 1, 6, 7, 9-11 and 13-15 as follows.

1. (Currently Amended) An information processing method of receiving image data compression-coded for each tile and encrypting the image data, comprising:

repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups so as to define a hierarchical structure of the tile groups;

generating encryption key information of an uppermost layer for an entire image expressed by encoded data;

executing, up to a tile located at a terminal, processing for generating encryption key information for a tile group of a tile located at a lower layer on the basis of encryption key information generated for a tile group located at an upper layer in the hierarchical structure and a one-way function, so as to generate encryption keys for each tile;

~~when a designation input is given to define,~~ designating a desired tile group in a desired layer as an object to be encrypted~~, a desired tile group of a desired layer~~ in a tree structure of the tile groups~~, executing setting to encrypt a tile located at a terminal of a lower layer belonging to the tile group that is defined by the designation input~~; and

executing encryption processing for each tile, each of which ~~is set as an object to be encrypted~~is located at a lower layer belonging to the designated tile group, by using an encryption key generated for the tile ~~and outputting the encrypted encoded data and encoded data of an unencrypted tile~~.

2. (Canceled)

3. (Original) The method according to claim 2, wherein the function generates the key information by using coordinate position information of a tile group or a tile located at the lower layer.

4. (Original) The method according to claim 1, wherein the encryption key information of the uppermost layer is output to a predetermined authentication server on the Internet.

5. (Original) The method according to claim 1, wherein

the method further comprises a step of displaying the received encoded data as a hierarchical structure of tiles and tile groups, and

the desired tile group of the desired layer is designated from the hierarchical structure displayed in the display step.

6. (Currently Amended) An information processing apparatus for receiving image data compression-coded for each tile and encrypting the image data, comprising:

means for repeatedly forming one tile group form a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups so as to define a hierarchical structure of the tile groups;

means for generating encryption key information of an uppermost layer for an entire image expressed by encoded data;

means for executing, up to a tile located at a terminal, processing for generating encryption key information for a tile group or a tile located at a lower layer on the basis of encryption key information generated for a tile group located at an upper layer in the hierarchical structure and a one-way function, so as to generate encryption keys for each tile;

means for~~, when a designation input is given to define,~~ designating a desired tile group in a desired layer as an object to be encrypted~~, a desired tile group of a desired layer~~ in a tree structure of the tile groups~~, executing setting to encrypt a tile located at a terminal of a lower layer belonging to the tile group that is defined by the designation input~~; and

means for executing encryption processing for each tile, each of which ~~is set as an object to be encrypted~~is located at a lower layer belonging to the designated tile group, by using an encryption key generated for the tile ~~and outputting the encrypted encoded data and encoded data of an unencrypted tile~~.

7. (Currently Amended) A computer program, embodied in a computer-readable medium, which causes a computer that reads and executes the program to function as an information processing apparatus for receiving image data compression-coded for each tile and encrypting the image data, comprising:

means for repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups so as to define a hierarchical structure of the tile groups;

means for generating encryption key information of an uppermost layer for an entire image expressed by encoded data;

means for executing, up to a tile located at a terminal, processing for generating encryption key information for a tile group or a tile located at a lower layer on the basis of encryption key information generated for a tile group located at an upper layer in the hierarchical structure and a one-way function so as to generate encryption keys for each tile;

means for~~, when a designation input is given to define,~~ designating a desired tile group in a desired layer as an object to be encrypted~~, a desired tile group of a desired layer~~ in a tree structure of the tile groups~~, executing setting to encrypt a tile located at a terminal of a lower layer belonging to the tile group that is defined by the designation input~~; and

means executing encryption processing for each tile, each of which ~~is set as an object to be encrypted~~is located at a lower layer belonging to the designated tile group, by using an encryption key generated for the tile~~ and outputting the encrypted encoded data and encoded data of an unencrypted tile~~.

8. (Original) A computer-readable storage medium storing the computer program of claim 7.

9. (Currently Amended) An information processing method of receiving information containing encoded data of both encrypted and unencrypted tiles and reproducing an image, comprising:

repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups on the basis of the received information so as to define a hierarchical structure of the tile groups;

receiving key information to be used to decrypt a desired tile group of an upper layer containing an encrypted tile;

executing, up to a tile located at a terminal, processing for generating key information for a lower layer of the tile group indicated by the key information on the basis of the received key information and a one-way function so as to generate the key information for each tile; and

decrypting the encoded data of each encrypted tile by using the key information generated for each tile.

10. (Currently Amended) An information processing apparatus for receiving information containing encoded data of both encrypted and unencrypted tiles and reproducing an image comprising:

means for repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups on the basis of the received information so as to define a hierarchical structure of the tile groups;

means for receiving key information to be used to decrypt a desired tile group of an upper layer containing an encrypted tile;

means for executing, up to a tile located at a terminal, processing for generating key information for a lower layer of the tile group indicated by the key information on the basis of the received key information and a one-way function so as to generate key information for each tile; and

means for decrypting the encoded data of each encrypted tile by using the key information generated for each tile.

11. (Currently Amended) A computer program, embodied in a computer-readable medium, which causes a computer that reads and executes the program to function as an information processing apparatus for receiving information containing encoded data of both encrypted and unencrypted tiles and reproducing an image comprising:

means for repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups on the basis of the received information so as to define a hierarchical structure of the tile groups;

means for receiving key information to be used to decrypt a desired tile group of an upper layer containing an encrypted tile;

means for executing, up to a tile located at a terminal, processing for generating key information for a lower layer of the tile group indicated by the key information on the basis of the received key information and a one-way function so as to generate key information for each tile; and

means for decrypting the encoded data of each encrypted tile by using the key information generated for each tile.

12. (Original) A computer-readable storage medium storing the computer program of claim 11.

13. (Currently Amended) A processing method of a server which is connected to a network for providing a decryption key for an image containing encoded data of both encrypted and unencrypted tiles, comprising:

storing basic decrypting key information located at an uppermost layer of the image which has a hierarchical structure constructed by repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group form adjacent tile groups; and

deriving, when information that designates a tile group in a layer to be decrypted is received from a client on the network, sequentially ~~deriving~~ decryption key information from the basic decryption key to a lower layer until reaching the designated tile group of the designated layer, by using a one-way function, and, when decryption key information for the ~~corresponding~~ designated tile group is generated, notifying the client of the decryption key information.

14. (Currently Amended) A server which is connected to a network for providing a decryption key for an image containing encoded data of both encrypted and unencrypted tiles, comprising:

means for storing basic decryption key information located at an uppermost layer of the image which has a hierarchical structure constructed by repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups; and

deriving, means for, when information that designates a tile group in a layer to be decrypted is received from a client on the network, sequentially ~~deriving~~ decryption key information from the basic decryption key to a lower layer until reaching the designated tile group of the designated layer, by using a one-way function and, when decryption key information

for the ~~corresponding~~ designated tile group is generated, notifying the client of the decryption key information.

15. (Currently Amended) A computer program, embodied in a computer-readable medium, which causes a computer that reads and executes the program to function as a server which is connected to a network for providing a decryption key for an image containing encoded data of both encrypted and unencrypted tiles, comprising:

means for storing basic decryption key information located at an uppermost layer of the image which has a hierarchical structure constructed by repeatedly forming one tile group from a plurality of adjacent tiles in an image space and another tile group from adjacent tile groups; and

means for, when information that designates a tile group in a layer to be decrypted is received from a client on the network, sequentially deriving decryption key information from the basic decryption key to a lower layer until reaching the designated tile group of the designated layer, by using a one-way function and, when decryption key information for the ~~corresponding~~ designated tile group is generated, notifying the client of the decryption key information.

16. (Original) A computer-readable storage medium storing the computer program of claim 15.